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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/525,338

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Stefan Martin Hanstein

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EXAMINER

OLSEN, KAJ K

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,338	Applicant(s) HANSTEIN, STEFAN MARTIN	
	Examiner KAJ K. OLSEN	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-28 is/are rejected.
- 7) ☐ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The specification needs to open with a sentence stating that this application is a 371 National Stage Entry of PCT/DE03/02777 filed on August 19, 2003.

2. On p. 11, l. 8, the specification states that element 8 is a non-cross-linking silicone. Everywhere else in the specification, element 8 is a cross-linking silicone and the examiner believes the “non” should be deleted.

Appropriate correction is required.

Claim Objections

3. Claim 16 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can only depend from multiple claims in the alternative only. Claim 16 depends from two different claims simultaneously. See MPEP § 608.01(n). Accordingly, claim 16 has not been further treated on the merits.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1795

5. Claims 2-15 and 17-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 2 and 14 comprise multiple sentences and multiple periods. This is improper as claims must consist of a single sentence with no period usage except for the concluding period. See MPEP 608.01(m). Hence, applicant must amend the claim to be a single sentence and remove all periods within the claim (both the periods concluding the individual sentences as well as the period after each of the number steps) except for the concluding period.

7. Claim 2 is drawn to a procedure (i.e. method) to produce a gasket. However, the claim specifies the procedure with passive language (e.g. “[a]spiration of”, “[t]he pressing out”, etc). Claim 2 should be amended to rely on explicit recitation of steps that the applicant believes the invention comprises.

8. In claims 3-13, these claims depend from claim 2 and each of claims 3-13 state that the procedure in question is for “preferably a silicone gasket”. However, claim 2 specified that the gasket was made out of silicone oils and included a step of “[c]uring of the silicone gasket.” If claim 2 is specific to the production of a silicone gasket, then applicant should delete this preferably limitation from claims 3-13.

9. In claim 4, it is unclear what “an inner diameter” is referring back to. For the purpose of examination, the examiner will presume that this refers to the tip of the micropipette, but clarification in the claim is necessary.

10. Claims 4, 5, 10, 12, and 13 are indefinite because the claims contain broader and narrower ranges within the same claim. See MPEP 2173.05(c).

Art Unit: 1795

11. For claim 6, it doesn't appear that this claim further limits claim 2 because it only further specifies the utilization of silicone. Claim 2 already specified the use of silicone.
12. Claim 7 appears to lack an actual process step. The examiner recommends the applicant state that the inner diameter of the tip of the glass micropipette is less than or equal to 4 μm .
13. Claim 8 attempts to further limit claim 2 by specifying steps that can be done so as to permit the omitting of steps 2 and 3 of claim 2. This is improper. Applicant cannot specify the omitting of steps from a parent claim as that would potentially make the dependent claim broader than the claim from which it depends (see MPEP 608.01(n)).
14. In claim 9, "silanizing of the glass micropipette" is passive and applicant should remove the "of" to correct it.
15. In claim 10, "utilization of" is passive and should be replaced with --utilizing--.
16. In claim 11, the repeated utilization of "on one hand" and "on the other hand" is confusing and it is unclear how to interpret all the possible alternatives of the claim. This claim should be amended to be made clearer, preferably as a plurality of claims outlining the different possible combinations of mixtures.
17. Claim 14 is passive for the same reasons set forth above for claim 2.
18. Claim 15 attempts to further limit claim 14, but it includes a step of eliminating a limitation from a claim that it depends from. This is improper as discussed for claim 8 above.
19. Claims 18 and 24 consist of two sentences and are indefinite for the reasons set forth for claims 2 and 14 above.
20. In claim 19, "the utilization of" is passive and should be replaced with --utilizing--.

Art Unit: 1795

21. Claims 20-22 and 26-28 provides for the use of a gasket made by the procedure, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 20-22 and 26-28 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

22. In claim 23, “the utilization of” should be --utilizing--. Moreover, this claim is vague as it is unclear what the enzyme is to be utilized for. Applicant needs to be more specific what the enzyme is for and where it is to be utilized.

23. Claim 25 should be corrected as described for claim 19 above.

Claim Rejections - 35 USC § 102

24. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

25. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al (USP 5,102,526).

Art Unit: 1795

26. Brown discloses a sensor gasket that is a mixture of silicone polymers (silicone rubber and polydimethylsiloxane). See col. 3, ll. 31-43. Because said gasket is disclosed as a membrane, it would inherently have some non-vanishing permeability to gases, particularly small highly permeable gases such as hydrogen or helium. With respect to the gasket being a sensor to measure gas concentrations, that is only the intended use of the apparatus and the intended use need not be given further due consideration in determining patentability.

27. Claims 1, 20-22, and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hanstein et al (Sensors and Actuators B 81, 2001, pp. 107-114) with evidence from the Material Safety Data Sheet for Dow Corning 92-009 Dispersion Coating (hereafter "92-009 MSDS").

28. With respect to claim 1, Hanstein set forth a gasket for a gas sensor that is made from Dow Corning Dispersion Coating 92-009. See fig. 1 and section 2.4 on p. 109. The 92-009 MSDS evidences that this dispersion coating comprises at least two different silicone polymers, including trimethylated silica, vinyltri (methylethylketoxime) silane, and octamethylcyclotetrasiloxane. Hence, the gasket of Hanstein is inherently a mixture of silicone polymers and Hanstein anticipates the claim.

29. With respect to claims 20-22 and 26-28, these claims are drawn to the utilization of a product made by a process of claims 2 and 14 (for claims 20-22) or the utilization of a product made by a process of claims 2, 14, and 15 (for claims 26-28). Because product by process claims are not interpreted as being limited by the process steps utilized to make the product (see MPEP 2113), the utilization of that product in a further process is also deemed to not be limited to the process utilized for the construction of the product. Because Hanstein discloses a sensor

Art Unit: 1795

that appears to be substantially identical to the sensor of the present invention except for the manner in which the silicone gasket was constructed (compare fig. 1 of Hanstein with fig. 4 and 5 of the present invention and see the specification p. 12, ll. 5-9), the process from which it was made is the same as or obvious over the process utilized by de Beer (see *In re Thorpe*, 777 F.2d 695, 698). Hanstein teaches the use of the sensor for the measurement of CO₂ in plant leaves. See the abstract.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAJ K. OLSEN whose telephone number is (571)272-1344. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/525,338

Page 8

Art Unit: 1795

/Kaj K Olsen/

Primary Examiner, Art Unit 1795

September 20, 2008